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**FEDERAL - STATE - PRIVATE
COOPERATIVE SNOW SURVEYS**

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WATER SUPPLY OUTLOOK FOR OREGON

Prepared by

U. S. DEPARTMENT of AGRICULTURE ★ SOIL CONSERVATION SERVICE

Collaborating with

OREGON STATE UNIVERSITY

and

STATE ENGINEER of OREGON

Data included in this report were obtained by the agencies named above
in cooperation with other Federal, State and private organizations.

AS OF
MAR. 1, 1972

TO RECIPIENTS OF WATER SUPPLY OUTLOOK REPORTS:

Most of the usable water in western states originates as mountain snowfall. This snowfall accumulates during the winter and spring, several months before the snow melts and appears as streamflow. Since the runoff from precipitation as snow is delayed, estimates of snowmelt runoff can be made well in advance of its occurrence. Streamflow forecasts published in this report are based principally on measurement of the water equivalent of the mountain snowpack.

Forecasts become more accurate as more of the data affecting runoff are measured. All forecasts assume that climatic factors during the remainder of the snow accumulation and melt season will interact with a resultant average effect on runoff. Early season forecasts are therefore subject to a greater change than those made on later dates.

The snow course measurement is obtained by sampling snow depth and water equivalent at surveyed and marked locations in mountain areas. A total of about ten samples are taken at each location. The average of these are reported as snow depth and water equivalent. These measurements are repeated in the same location near the same dates each year.

Snow surveys are made monthly or semi-monthly from January 1 through June 1 in most states. There are about 1900 snow courses in Western United States and in the Columbia Basin in British Columbia. Networks of automatic snow water equivalent and related data sensing devices, along with radio telemetry are expanding and will provide a continuous record of snow water and other parameters of key locations.

Detailed data on snow course and soil moisture measurements are presented in state and local reports. Other data on reservoir storage, summaries of precipitation, current streamflow, and soil moisture conditions at valley elevations are also included. The report for Western United States presents a broad picture of water supply outlook conditions, including selected streamflow forecasts, summary of snow accumulation to date, and storage in larger reservoirs.

Snow survey and soil moisture data for the period of record are published by the Soil Conservation Service by states about every five years. Data for the current year is summarized in a West-wide basic data summary and published about October 1 of each year.

COVER PHOTO NUMBER ORC 221-3

PUBLISHED BY SOIL CONSERVATION SERVICE

The Soil Conservation Service publishes reports following the principal snow survey dates from January 1 through June 1 in cooperation with state water administrators, agricultural experiment stations and others. Copies of the reports for Western United States and all state reports may be obtained from Soil Conservation Service, Western Regional Technical Service Center, Room 209, 701 N. W. Glisan, Portland, Oregon 97209.

Copies of state and local reports may also be obtained from state offices of the Soil Conservation Service in the following states:

STATE	ADDRESS
Alaska	P. O. Box "F", Palmer, Alaska 99645
Arizona	6029 Federal Building, Phoenix, Arizona 85025
Colorado (N. Mex.)	P. O. Box 17107, Denver, Colorado 80217
Idaho	Room 345, 304 N. 8th. St., Boise, Idaho 83702
Montana	P. O. Box 970, Bozeman, Montana 59715
Nevada	P. O. Box 4850, Reno Nevada 89505
Oregon	1218 S. W. Washington St., Portland, Oregon 97205
Utah	4012 Federal Bldg., 125 South State St., Salt Lake City, Utah 84111
Washington	360 U.S. Court House, Spokane, Washington 99201
Wyoming	P. O. Box 2440, Casper, Wyoming 82601

PUBLISHED BY OTHER AGENCIES

Water Supply Outlook reports prepared by other agencies include a report for California by the Water Supply Forecast and Snow Surveys Unit, California Department of Water Resources, P. O. Box 388, Sacramento, California 95802 --- and for British Columbia by the Department of Lands, Forests and Water Resources, Water Resources Service, Parliament Building, Victoria, British Columbia



WATER SUPPLY OUTLOOK FOR OREGON

and
FEDERAL - STATE - PRIVATE COOPERATIVE SNOW SURVEYS

Issued

MARCH 8, 1972

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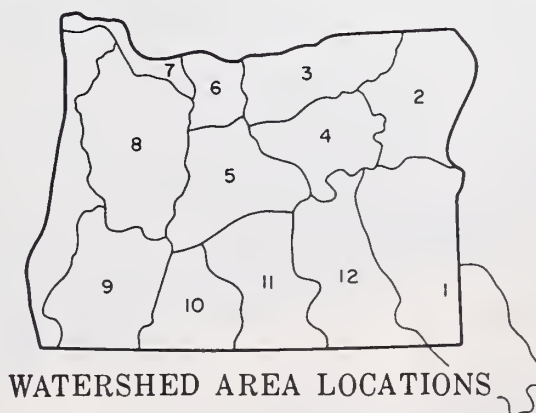
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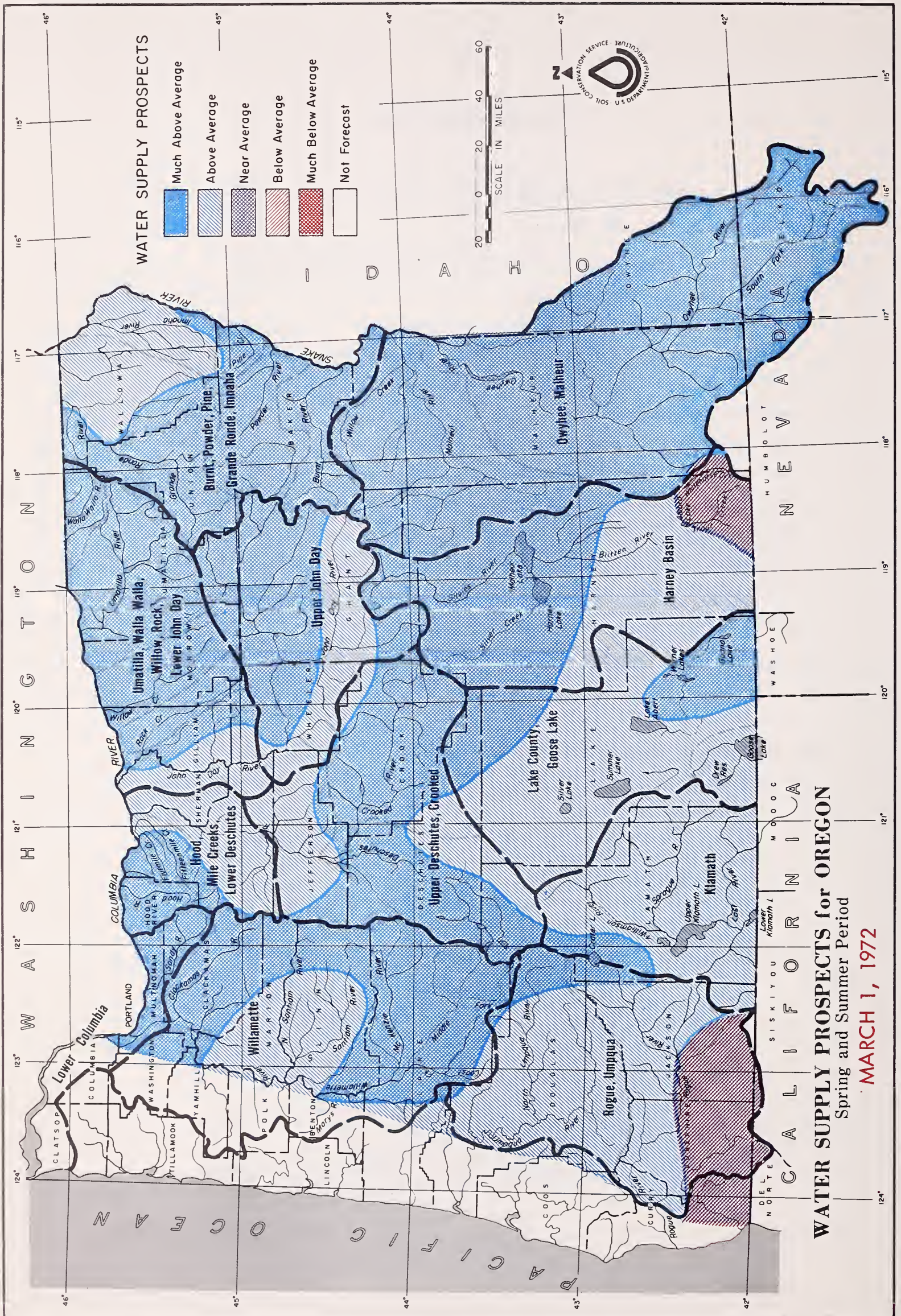
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WATER SUPPLY OUTLOOK for OREGON

MARCH 1, 1972

The water supply outlook for Oregon remains excellent. A heavy build-up of snow in the mountains has assured that spring and summer streamflow will be above average. Reservoir storage is well above average due to the high runoff that has occurred so far this year.

SNOW COVER

The Oregon mountains have been covered with a record to near record snowpack. Twenty-eight snow courses established new maximum amounts of water content for March 1. Heaviest accumulations are in the Grande Ronde and Umatilla basins and along the crest of the Cascades.

PRECIPITATION

Precipitation during February was above normal west of the Cascades, below normal in the central areas of the state, and near average elsewhere. All areas except Lake County have received above average precipitation for the winter period November through March.

RESERVOIR STORAGE

Twenty-four major irrigation reservoirs are storing amounts 130 percent of average for March 1. Most are expected to fill and some are spilling already. This is the third year in a row of excellent stored water supplies in the state.

STREAMFLOW

Streamflow during January and February has been well above average. Rain and melting snow have caused flooding on some streams and others to run bank full during the month. Streamflow this spring and summer will be above average. The highest volume since 1894 is forecast for the Columbia at The Dalles for the April-September period.

continued on next page

continued -

Prospective April-September streamflow for some representative streams are as follows:

<u>STREAM</u>	<u>FORECAST</u> <u>As Percent of 1953-67 Avg.</u>
Owyhee Net Inflow	200
Malheur near Drewsey	168
Deschutes near Benham Falls	118
Grande Ronde near La Grande	149
Willamette, Mid. Fk. nr. Oakridge	134
Upper Klamath Lake Net Inflow	112
Rogue at Raygold	113
Silvies near Burns	175
John Day, Mid. Fk. near Ritter	121
Columbia at The Dalles	129

This report contains data furnished by the Oregon State Engineer, U. S. Geological Survey, NOAA National Weather Service, and other cooperators.





WATER SUPPLY OUTLOOK OWYHEE, MALHEUR WATERSHEDS OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

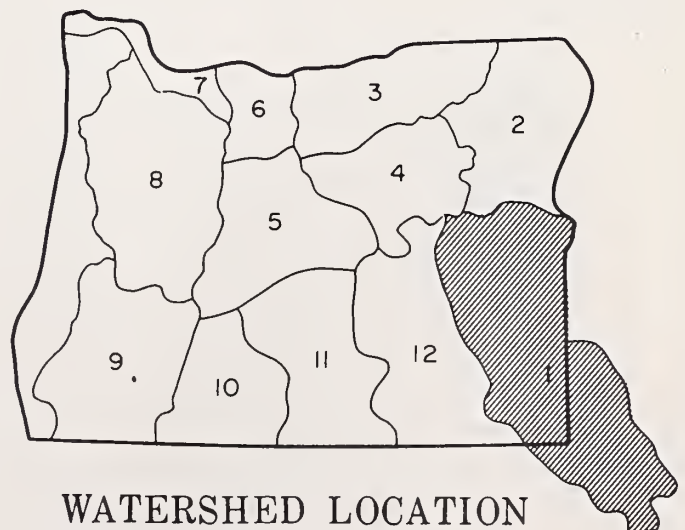
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR MALHEUR COUNTY FOR THE THIRD YEAR IN A ROW. SNOW COVER IS 175% OF AVERAGE ON THE OWYHEE AND 135% ON THE MALHEUR. RESERVOIR STORAGE IS HIGHER THAN NORMAL DUE TO THE GOOD RUNOFF EXPERIENCED SO FAR THIS YEAR. STREAMFLOW ON THE OWYHEE SINCE THE FIRST OF THE YEAR HAS BEEN 3 TIMES THE NORMAL. SOILS ON THE UPPER REACHES OF THE WATERSHED ARE SLIGHTLY DRIER THAN USUAL. EXPECTED STREAMFLOW THIS COMING SPRING AND SUMMER WILL BE 1 1/2 TO 2 TIMES NORMAL. THE POTENTIAL FOR HIGH FLOWS BELOW OWYHEE DAM EXISTS AS THE SNOWMELT RUNOFF REACHES ITS PEAK.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Boulder Creek	Excellent	Average
Bully Creek	Average	Average
Cow Creek	Excellent	Average
Jordan Creek	Excellent	Excellent
Jordan Valley Irrig. Dist	Excellent	Excellent
McDermitt Creek	Average	Average
Oregon Canyon Creek	Average	Average
Owyhee Project	Excellent	Excellent
Succor Creek	Excellent	Average
Tenmile Creek	Average	Average
Vale-Oregon Irrig. Dist.	Excellent	Excellent
Warm Springs Irrig. Dist.	Excellent	Excellent
Willow Creek (Reservoired)	Excellent	Excellent



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Bully Creek at Warm Springs	11.5	101	March-May		11.4
Jordan Creek above Lone Tree Creek	120	141	April-July		85
	120	141	April-Sept.		85
Malheur near Drewsey	158	170	March-July		93
	120	168	April-Sept.		72
Malheur, North Fork at Beulah	101	151	March-July		67
	86	143	April-Sept.		60
Owyhee Reservoir Net Inflow	700	190	March-July	696	369
	600	200	April-Sept.	504	300

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Owyhee near Rome	1000 250	June 19 July 4	May 24 June 20

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Antelope	70.0	23.1	47.7	11.8
Beulah	60.0	38.7	45.2	30.5
Bully Creek	30.0	14.9	22.6	12.7
Owyhee	715.0	621.2	674.0	411.8
Warm Springs	191.0	138.1	136.6	94.0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Jordan Creek	1	100	106
Malheur River	3	79	86
Owyhee River	3	81	92

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Jordan Creek	4	150	198
Malheur River	5	131	135
Owyhee River	5	233	173

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (l) Ground measurement. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

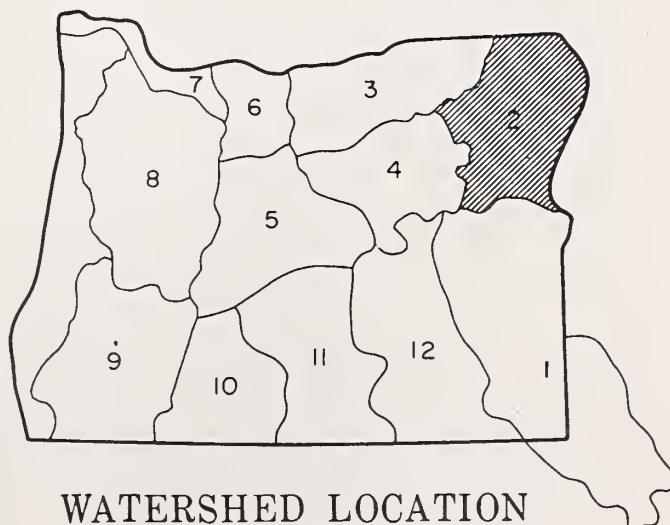
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE IN PROSPECT FOR WATER USERS IN NORTHEAST OREGON DURING NEXT SPRING AND SUMMER. THE MOUNTAIN SNOWPACK RANGES FROM 137 PERCENT OF AVERAGE IN THE WALLOWA MOUNTAINS TO 181 PERCENT OF AVERAGE ON THE GRANDE RONDE DRAINAGE. SOME SNOW COURSES ON THE GRANDE RONDE DRAINAGE SET ALL TIME MARCH 1 RECORDS. PRECIPITATION DURING FEBRUARY WAS 93 PERCENT OF AVERAGE. THE FEBRUARY-NOVEMBER PERIOD HAD 116 PERCENT OF AVERAGE RAINFALL. RESERVOIR STORAGE IS NEAR AVERAGE FOR MARCH FIRST. THE GRANDE RONDE AT LA GRANDE FLOWED 149 PERCENT OF NORMAL DURING FEBRUARY.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Alder Slope	Excellent	Excellent
Baker Valley	Excellent	Excellent
Big Creek	Excellent	Excellent
Clover Cr. (nr. N. Powder)	Excellent	Excellent
Cove	Excellent	Excellent
Durkee	Excellent	Excellent
Eagle Valley	Excellent	Excellent
Elgin	Excellent	Excellent
Enterprise-Joseph	Excellent	Excellent
Hereford-Bridgeport	Excellent	Excellent
Imnaha River	Excellent	Excellent
LaGrande-Island City	Excellent	Excellent
Lostine-Wallowa	Excellent	Excellent
No. Powder River-Wolf Creek	Excellent	Excellent
Pine Valley	Excellent	Excellent
Powder River-Elk Creek	Excellent	Excellent
Summerville	Excellent	Excellent
Sumpter Valley	Excellent	Excellent
Union-Hot Lake	Excellent	Excellent
Unity	Excellent	Excellent



WATERSHED LOCATION

Report prepared by

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U. S. DEPARTMENT OF AGRICULTURE - SOIL CONSERVATION SERVICE

1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Bear near Wallowa	86	130	April-Sept.		66
Burnt near Hereford ^d	71	168	March-July		43
	60	171	April-Sept.		35
Catherine near Union	85	133	April-Sept.		64
Eagle Creek abv. Skull Creek	209	124	April-July		168 ^m
	227	125	April-Sept.		182 ^m
Grande Ronde at La Grande	296	143	March-July	220	207
	261	149	April-Sept.	194	175
Hurricane near Joseph	54	115	April-Sept.		47
Imnaha at Imnaha	361	118	April-Sept.		327
Lostine near Lostine	148	119	April-Sept.		125
Powder near Sumpter	81	150	April-July		60
	83	147	April-Sept.		62
Wallowa, East Fork near Joseph ^d	15.2	120	March-Sept.		12.7
	14.4	120	April-Sept.		12.0

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Burnt, Powder	2	67	85
Grande Ronde, Catherine Cr., Imnaha River	3	88	102

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Phillips Lake	73.5	53.3	65.9	- -
Thief Valley	17.4	17.4	17.4	- -
Unity	25.2	13.0	18.3	11.9
Wallowa Lake	37.5	20.8	21.6	22.4

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Burnt River	4	135	153
Grande Ronde River above La Grande	4	348	181
Powder River	5	115	147
Wallowa, Imnaha, Catherine Creek	6	116	137

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

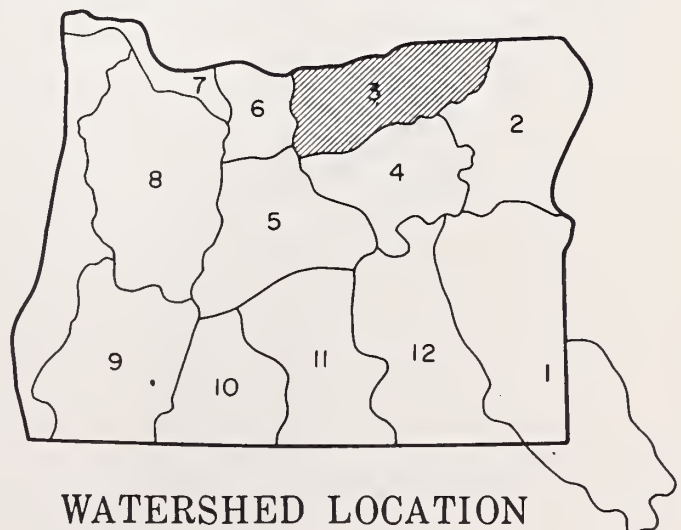
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE FORECAST FOR ALL AREAS OF GILLIAM, MORROW AND UMATILLA COUNTIES. A RECORD TO NEAR RECORD SNOWPACK HAS BEEN MEASURED IN THE BLUE MOUNTAINS. THE HEAVIEST SNOW EXISTS ON BIRCH CREEK AND BUTTER CREEK. THERE IS A POTENTIAL FOR HIGH FLOWS IF UNUSUALLY WARM TEMPERATURES OR UNUSUAL RAINFALL OCCURS DURING THE SNOWMELT RUNOFF PERIOD. ALL MAJOR RESERVOIRS IN THE AREA WILL FILL EARLY IN THE SEASON. SOIL MOISTURE IS NEAR NORMAL. ALL STREAMFLOW THIS SPRING WILL BE WELL ABOVE AVERAGE.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Walla Walla River, No. Fork	Excellent	Average
Walla Walla River, So. Fork	Excellent	Average
Walla Walla River, Main	Excellent	Average
Walla Walla River, Little	Excellent	Average
Couse Creek	Excellent	Average
Dry Creek	Excellent	Average
Pine Creek	Excellent	Average
Umatilla River, Main	Excellent	Average
Wildhorse Creek	Excellent	Average
Umatilla R. (Cold Springs Reservoir)	Excellent	Excellent
Umatilla R. (McKay Res.)	Excellent	Excellent
McKay Creek	Excellent	Excellent
Birch Creek	Excellent	Average
Butter Creek	Excellent	Average
Willow Creek	Excellent	Average
Rhea Creek	Excellent	Average
Rock Creek (John Day Tributary)	Excellent	Average



WATERSHED LOCATION

Report prepared by

T.A. GEORGE AND H.M. VANCE

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1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Birch Creek at Rieth	41	169	March-July		24.3
	31	168	April-Sept.		18.4
Butter Creek near Pine City	16.0	129	March-July		12.4
McKay near Pilot Rock	40	147	April-July		27
	41	146	April-Sept.		28
Umatilla near Gibbon	134	135	March-Sept.		99
	107	134	April-Sept.		80
Umatilla at Pendleton	272	131	March-Sept.	191	208
	209	135	April-Sept.	144	155
Walla Walla, South Fork near Milton	91	115	March-Sept.		79
	78	116	April-Sept.		67

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Umatilla at Pendleton	550	July 2	June 22

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Cold Springs	50.0	33.7	42.0	40.3
McKay	73.8	62.0	41.0	35.5

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Umatilla, Walla Walla, McKay Creek	3	98	94

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
McKay Creek	3	408	215
Umatilla River	3	258	194
Walla Walla River	2	204	194

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK UPPER JOHN DAY WATERSHEDS OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

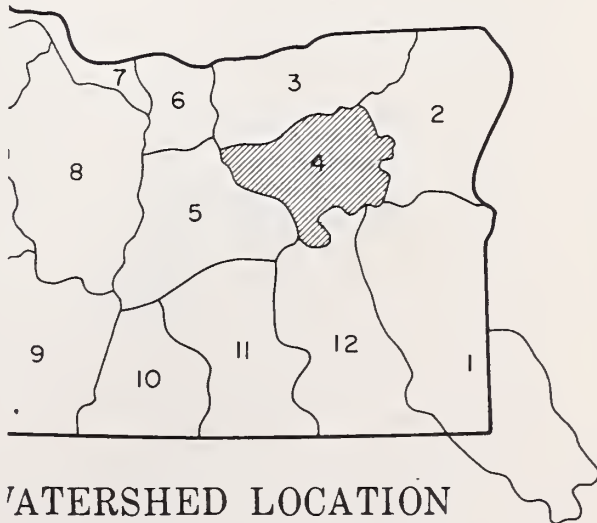
GENERAL OUTLOOK

THE PROSPECTS ARE FOR EXCELLENT WATER SUPPLIES FOR WATER USERS IN THE UPPER JOHN DAY BASIN DURING THE SPRING AND SUMMER OF 1972. THE MOUNTAIN SNOWPACK IS 150 PERCENT OF AVERAGE ON MARCH FIRST. SOME SNOW COURSES ARE AT THEIR APRIL FIRST AVERAGE. PRECIPITATION DURING FEBRUARY WAS 55 PERCENT OF AVERAGE AND 108 PERCENT OF AVERAGE DURING THE NOVEMBER THROUGH MARCH PERIOD. THE JOHN DAY AT SERVICE CREEK FLOWED 119 PERCENT OF AVERAGE DURING FEBRUARY.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Beech Creek	Excellent	Average
Beech Creek-Fox-Long Cr.	Excellent	Average
Bridge-Mountain Creeks	Excellent	Average
Camas Creek	Excellent	Average
Cherry Creek	Excellent	Average
Indian-Pine Creeks	Excellent	Average
John Day River, Main Fork	Excellent	Average
John Day River, Mid. Fork	Excellent	Average
John Day River, N. Fork	Excellent	Average
John Day River, S. Fork	Excellent	Average
Monument-Kimberly	Excellent	Average
Strawberry Creek	Excellent	Average



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average i
Camas Creek near Ukiah	64	134	March-July		43
	53	139	April-Sept.		35
John Day at Prairie City	64	125	March-July		51
	57	123	April-Sept.		46
John Day, Middle Fork at Ritter	165	122	March-July		135
	140	121	April-Sept.		116
John Day, North Fork at Monument	993	146	March-July		682
	839	144	April-Sept.		589
Strawberry near Prairie City	9.8	124	March-July		7.9
	9.9	125	April-Sept.		8.4

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average i
John Day abv. Dayville	7	84	97
John Day, North Fork	2	86	98

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average i
John Day, North Fork	7	165	162
John Day abv. Dayville	5	147	156

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK UPPER DESCHUTES, CROOKED WATERSHEDS OREGON

as of
MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

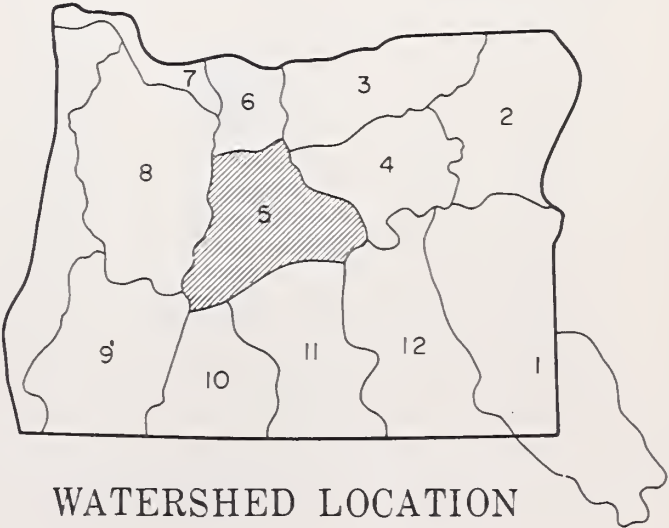
GENERAL OUTLOOK

WATER USERS IN THE UPPER DESCHUTES, CROOKED RIVER WATERSHEDS WILL HAVE EXCELLENT WATER SUPPLIES DURING THE SPRING AND SUMMER OF 1972. MOUNTAIN SNOWPACKS REMAIN AT 148 TO 169 PERCENT OF AVERAGE. PRECIPITATION DURING FEBRUARY WAS 83 PERCENT OF AVERAGE ANF FOR THE NOVEMBER THROUGH FEBRUARY PERIOD 119 PERCENT OF AVERAGE. MOUNTAIN SOILS ARE WET AND SHOULD ENHANCE SPRING RUNOFF. THE DESCHUTES AT MOODY FLOWED 95 PERCENT OF AVERAGE DURING FEBRUARY. MOST RESERVOIRS ARE HOLDING ABOVE AVERAGE AMOUNTS FOR MARCH 1 AND WILL FILL THIS YEAR.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Arnold Irrigation District	Excellent	Average
Bear Creek	Excellent	Average
Beaver Creek	Excellent	Average
Camp Creek	Excellent	Average
Central Ore. Irrig. Dist.	Excellent	Average
Crooked River	Excellent	Average
Deschutes River	Excellent	Average
Hay-Trout Creeks	Excellent	Average
Lone Pine Irrig. Dist.	Excellent	Average
Mill Creek	Excellent	Average
North Unit Irrig. Dist	Excellent	Average
Ochoco Creek	Excellent	Average
Sisters Irrigation Dist.	Excellent	Average
Snow Creek Irrig. Dist.	Excellent	Average
Squaw Creek Irrig. Dist.	Excellent	Average
Swalley Ditch	Excellent	Excellent
Tumalo Project	Excellent	Excellent
Walker Basin Irrig. Dist.	Excellent	Excellent



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Beaver Creek near Paulina	65	197	March-July		33
	38	190	April-Sept.		20
Crane Prairie Reservoir Total Inflow ^d	172	137	April-Sept.		126
Crescent at Crescent Lake ^d	42	160	March-July		26
	46	165	April-Sept.		28
Crooked near Post above Prineville Reservoir	237	169	March-July		140
	177	175	April-Sept.		101
Deschutes at Benham Falls ^d	478	122	April-July		393
	703	118	April-Sept.		596
Deschutes below Snow Creek	100	137	March-Sept.		73
	93	141	April-Sept.		66
Deschutes, Little near La Pine ^d	145	148	March-July		98
	145	153	April-Sept.		95
Ochoco Reservoir Net Inflow	47	158	March-July		30
	36	158	April-Sept.		23
Odell near Crescent	42	139	April-Sept.		30
Squaw near Sisters	62	121	April-Sept.		51
Tumalo near Bend ^d	66	135	April-Sept.		49

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Crane Prairie net Inflow	300	*	July 15
Deschutes at Bend	1500	*	July 1
Little Deschutes near La Pine	400	June 28	June 7
	200	Aug. 2	July 8
*Forecast issued April 1.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Crane Prairie	55.3	55.8	45.5	46.6
Crescent Lake	86.9	76.2	45.9	49.2
Ochoco	47.5	31.0	40.5	27.5
Prineville	153.0	100.8	111.9	97.4
Wickiup	200.0	192.2	156.0	178.3

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Crooked R., Upper Deschutes River	3	97	103

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Crooked, Ochoco	4	183	169
Deschutes abv. Wickiup	3	135	164
Little Deschutes	4	116	148
Tumalo & Squaw Crs.	3	127	164

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS

OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

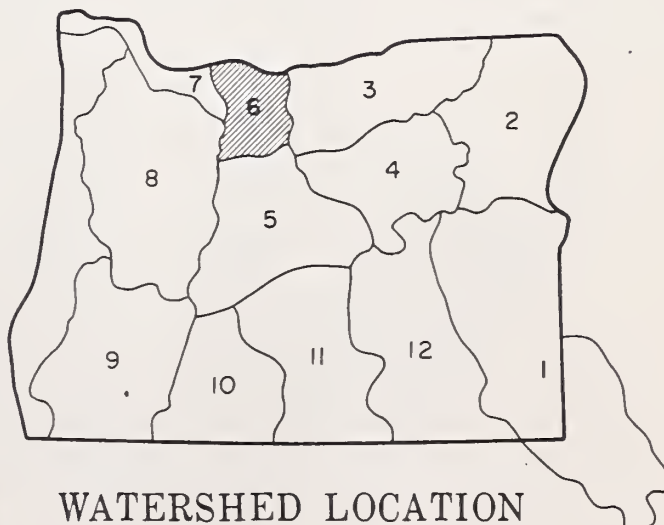
GENERAL OUTLOOK

WATER USERS IN THE HOOD RIVER-LOWER DESCHUTES AREA WILL HAVE EXCELLENT WATER SUPPLIES DURING THE 1972 SEASON. THE MOUNTAIN SNOWPACK IS 166 TO 190 PERCENT OF THE MARCH FIRST AVERAGE. PRECIPITATION DURING FEBRUARY WAS 108 PERCENT OF AVERAGE AND 102 PERCENT FOR THE NOVEMBER THRU JANUARY PERIOD. SOIL MOISTURE SUPPLIES ARE NEAR AVERAGE. WASCO RESERVOIR CONTAINED 225 PERCENT OF AVERAGE STORAGE FOR MARCH FIRST.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Aldridge Ditch (Tony Creek)	Excellent	Excellent
Badger Creek	Excellent	Excellent
Dee Irrigation Dist.	Excellent	Excellent
East Fork Irrig. Dist.	Excellent	Excellent
Farmers Irrigation Dist.	Excellent	Excellent
Hood River Irrig. Dist.	Excellent	Excellent
Juniper Flat	Excellent	Excellent
Middle Fork Irrig. Dist.	Excellent	Excellent
Mile Creeks	Excellent	Average
Mill Creek	Excellent	Average
Mount Hood Irrig. Dist.	Excellent	Excellent
Rock-Gate-Threemile Crs.	Excellent	Excellent
Tygh Creek	Excellent	Excellent
White River	Excellent	Excellent



WATERSHED LOCATION

STREAMFLOW FORECASTS

STREAMFLOW FORECASTS	THIS YEAR			PAST RECORD	
BASIN, STREAM and/or FORECAST POINT	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Hood River near Tucker Bridge	367	130	April-July		282
	425	126	April-Sept.		336
Hood, West Fork near Dee	175	125	April-July		140
	206	128	April-Sept.		161
White below Tygh Valley	222	173	April-July		128
	252	174	April-Sept.		144

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Clear Branch Inflow	*59	July 15-31	**39
*Average cfs forecast to flow for this two-week period.			
**Average cfs for period of record.			

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Clear Lake (Wasco)	11.9	7.9	4.9	3.5

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Hood River, Mile Creeks	1	99	--

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Hood River	6	133	180
Mile Creeks	3	150	166
White River	3	157	190

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK LOWER COLUMBIA WATERSHEDS OREGON

as of

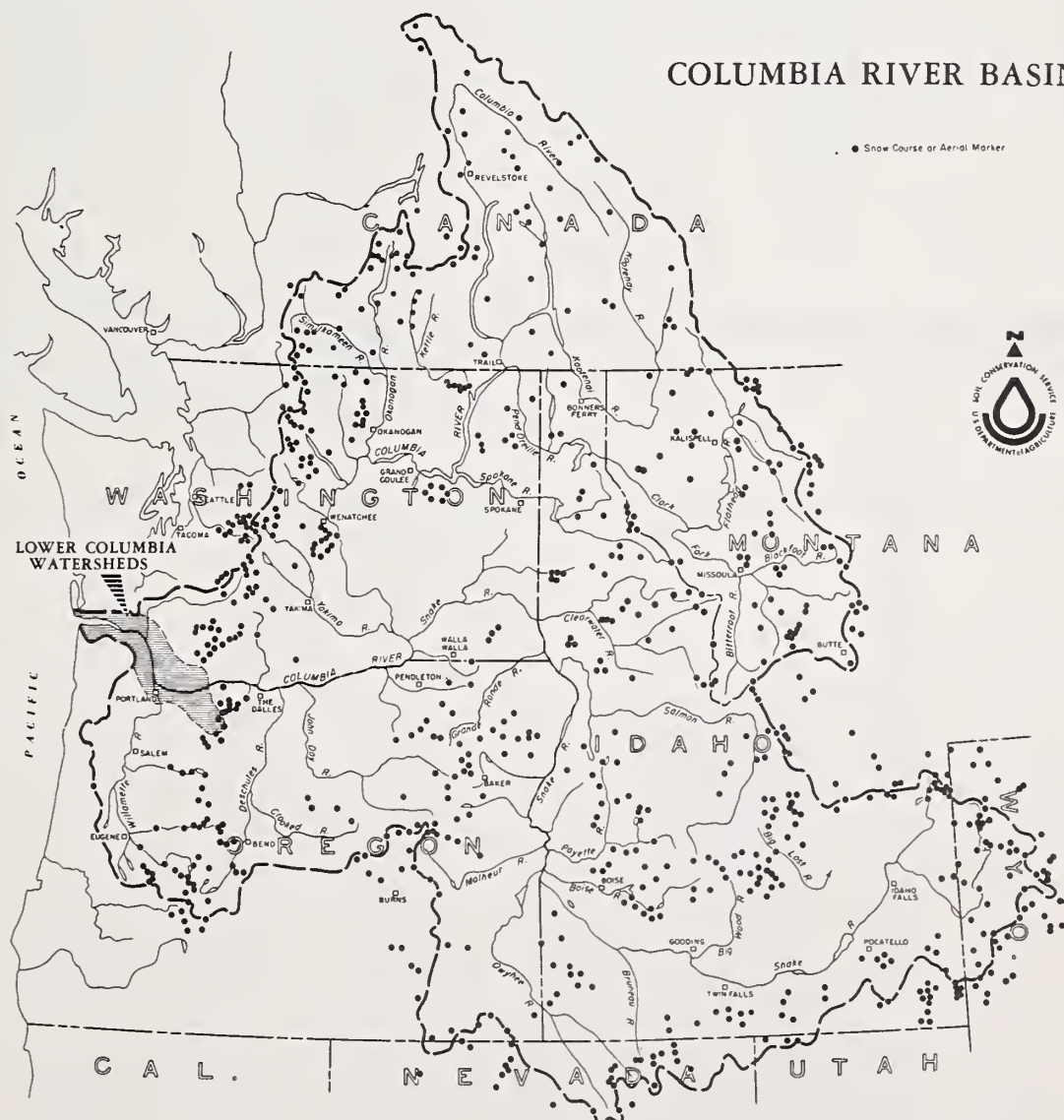
MARCH 1, 1972



U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

GENERAL OUTLOOK

ASSUMING THAT AVERAGE WEATHER CONDITIONS PREVAIL DURING THE REMAINDER OF THE SNOW ACCUMULATION AND MELT PERIOD, THE VOLUME OF THIS YEARS RUNOFF OF THE COLUMBIA AT THE DALLES WILL BE SIMILAR TO THAT OF 1948 AND 1956. HOWEVER, AVAILABLE RESERVOIR STORAGE IS NOW GREATER THAN IN EARLIER YEARS AND WILL BE USED BY MANAGEMENT AGENCIES TO LOWER THE PEAK FLOW. THE PRESENT SNOWPACK VARIES BETWEEN ABOUT 135 AND 200% OF THE USUAL AMOUNT. FOR THE BASIN AS A WHOLE THE SNOW IS NEAR 160% OF AVERAGE. WATER SUPPLIES WILL BE ABUNDANT FOR THE ENTIRE SEASON.



Report prepared by
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1218 S.W. WASHINGTON ST.
PORTLAND, OREGON 97205

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <i>i</i>
Sandy River	2	155	190

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Columbia at The Dalles ^d	95,580	132	April-June		72,406
	135,500	129	April-Sept.		105,176
Sandy River near Marmot	466	130	April-July		359
	521	126	April-Sept.		413

HISTORICAL DATA (Columbia River at The Dalles)

YEAR	STREAMFLOW ^d (1,000 A.F.)			PEAK (1,000 c.f.s.)	DATE
	APR. - SEPT.	APR. - JUNE	MAY - JUNE		
1953	100,600	64,900	55,800	609	June 17
1954	119,500	70,500	59,300	561	May 23
1955	99,500	58,300	50,300	545	June 26
1956	131,400	96,900	75,800	815	June 3
1957	105,700	80,500	67,200	700	May 22
1958	97,700	72,000	58,600	593	May 31
1959	112,500	71,900	58,900	555	June 23
1960	97,000	64,000	48,000	442	June 6
1961	101,400	74,400	64,000	699	June 8
1962	94,600	64,100	49,200	460	June 5
1963	87,000	56,300	46,200	437	June 18
1964	109,020	70,739	61,313	662	June 18
1965	114,137	80,024	62,477	520	June 9
1966	87,268	58,120	45,922	396	June 12
1967	107,771	72,903	65,112	622	June 10
1953-67 Avg.	105,181	72,408	59,689	574	

LOWER COLUMBIA RIVER FLOOD STAGES (with 9.5' tide at Astoria)

VANCOUVER GAGE (Weather Bu.)	FLOW AT THE DALLES (1,000 c.f.s.)	DRAINAGE DISTRICT PUMPHOUSE						
		SANDY	SAUVIE ISL.	SCAPPOOSE	DEER ISL.	RAINIER	BEAVER	WOODSON
		RIVER MILES						
		118.9	96.0	91.0	77.0	62.0	52.0	47.0
35 (1894,	1210	41.2	34.2	33.3	28.5	21.9	17.5	15.5
34	1160	40.5	33.5	32.5	27.7	21.2	17.0	15.0
33	1100	39.6	32.4	31.4	26.7	20.2	16.1	14.3
32	1050	38.9	31.5	30.5	25.7	19.5	15.4	13.7
31 (1948)	1000	38.0	30.7	29.5	25.1	18.8	14.7	13.0
30	943	36.6	29.5	28.5	24.3	18.1	14.0	12.4
29	897	35.5	28.5	27.7	23.7	17.5	13.4	11.8
28	853	34.3	27.5	26.7	22.8	17.0	13.0	11.4
27 (1956)	811	33.0	26.5	25.6	21.8	16.2	12.5	11.0
26 (1950)	771	32.1	25.5	24.6	20.9	15.5	12.2	10.7
25	733	30.7	24.2	23.2	19.7	14.6	11.7	10.3
24	697	29.7	23.0	22.2	19.0	14.1	11.4	10.2
23	662	29.0	22.3	21.4	18.4	13.6	11.2	10.0
22	628	28.1	21.4	20.3	17.2	13.0	10.9	9.7
21	595	27.2	20.7	19.5	16.4	12.6	10.6	9.6
20 (1954)	564	26.2	19.8	18.6	15.5	12.1	10.2	9.4
19	534	25.5	19.2	18.0	15.0	11.8	10.0	9.3
18	501	24.4	18.3	17.2	14.3	11.4	9.8	9.1
17	479	23.4	17.4	16.4	13.7	11.0	9.6	8.9
16	452	22.4	16.5	15.5	13.0	10.5	9.3	8.7

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records.



WATER SUPPLY OUTLOOK WILLAMETTE WATERSHEDS OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

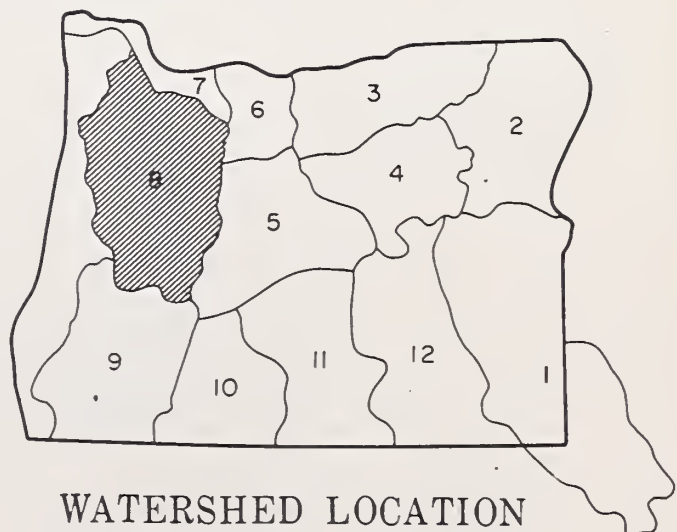
GENERAL OUTLOOK

WILLAMETTE VALLEY WATER SUPPLIES WILL BE EXCELLENT DURING THE SPRING AND SUMMER OF 1972. THE MARCH 1 MOUNTAIN SNOWPACK RANGES FROM 165 PERCENT OF THE MARCH 1 AVERAGE ON THE MIDDLE FORK OF THE WILLAMETTE DRAINAGE TO 228 PERCENT OF AVERAGE ON THE SANTIAM RIVER DRAINAGE. PRECIPITATION DURING FEBRUARY WAS 131 PERCENT OF AVERAGE AND 129 PERCENT OF AVERAGE FOR THE NOVEMBER-FEBRUARY PERIOD. THE MIDDLE FORK OF THE WILLAMETTE FLOWED 159 PERCENT OF AVERAGE DURING FEBRUARY; PEAK FLOWS WERE BELOW THOSE THAT OCCURRED DURING JANUARY. POWER RESERVOIRS ARE BEING HELD AT THE USUAL LOW LEVELS.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Calapooya	Excellent	Excellent
Clackamas	Excellent	Excellent
McKenzie	Excellent	Excellent
Molalla	Excellent	Excellent
Santiam, North	Excellent	Excellent
Santiam, South	Excellent	Excellent
Willamette, Coast Fork	Excellent	Excellent
Willamette, Middle Fork	Excellent	Excellent



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Clackamas at Estacada	860	125	April-July		689
	1010	126	April-Sept.		800
Clackamas above Three Lynx	706	137	April-July		517
	810	133	April-Sept.		610
McKenzie at McKenzie Bridge	609	131	April-July		465
	800	130	April-Sept.		614
McKenzie near Vida	1431	132	April-July		1087
	1703	129	April-Sept.		1321
McKenzie, South Fork near Rainbow	347	157	April-July		221
	375	149	April-Sept.		252
Oak Grove Fork above Power Intake	161	129	April-July		125
	211	129	April-Sept.		163
Row near Dorena	126	118	April-July		106
	129	118	April-Sept.		110
Santiam, North at Mehama ^d	1040	130	April-July		800
	1139	126	April-Sept.		901
Santiam, South at Waterloo	753	126	April-July		596
	782	123	April-Sept.		633
Willamette, Mid. Fk. blw. N. Fk. nr. Oakridge ^d	995	137	April-July	992	725
	1110	134	April-Sept.	1124	828
Willamette, No. Fk. of Mid. Fk. near Oakridge	255	129	April-July		198
	275	126	April-Sept.		219
Willamette at Salem ^d	5858	125	April-July		4696
	6353	122	April-Sept.		5199

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Blue River	85.6*	53.2	30.9	- -
Cottage Grove	30.0*	11.6	7.6	9.3
Cougar	155.2*	73.2	57.9	- -
Detroit	299.9*	178.6	126.0	94.9
Dorena	70.5*	33.8	16.7	21.1
Fall Creek	115.0*	57.6	42.7	- -
Fern Ridge	94.2*	50.8	44.5	33.4
Foster	30.0*	8.3	2.0	- -
Green Peter	270.0*	168.6	16.6	- -
Hills Creek	200.0*	0.0	75.7	63.3
Lookout Point	337.2*	167.6	129.8	116.9
Timothy Lake	61.7	58.0	59.9	47.8
*Multiple purpose reservoir--space reserved primarily for flood runoff.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Clackamas River	2	147	205
McKenzie River	3	126	192
Row River	2	110	189
Santiam River	4	120	228
Willamette, Mid. Fk.	5	123	165

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

WATER SUPPLY OUTLOOK ROGUE, UMPQUA, WATERSHEDS OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

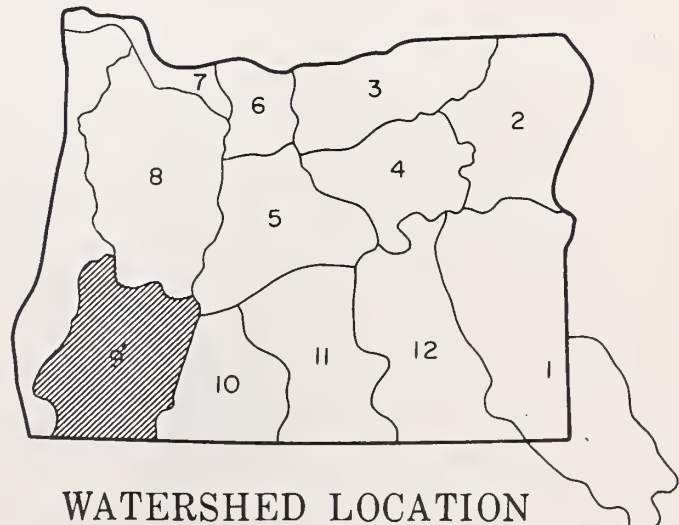
GENERAL OUTLOOK

ROGUE AND UMPQUA WATER USERS HAVE EXCELLENT WATER SUPPLIES IN PROSPECT DURING THE SPRING AND SUMMER OF 1972, WHILE WATER USERS ON STREAMS DRAINING THE SISKIYOU MOUNTAINS WILL HAVE AVERAGE WATER SUPPLIES. SNOW COVER RANGES FROM 96 PERCENT OF AVERAGE ON THE ILLINOIS TO 163 PERCENT OF AVERAGE ON THE BATTLE CREEK WATERSHED, WITH THE ROGUE AND NORTH UMPQUA HAVING 153 AND 147 PERCENT RESPECTIVELY. PRECIPITATION FOR FEBRUARY WAS 117 PERCENT OF AVERAGE AND 113 PERCENT OF AVERAGE FOR THE NOVEMBER-FEBRUARY PERIOD. FOUR OF THE AREA RESERVOIRS ARE HOLDING 160 PERCENT OF AVERAGE AMOUNTS FOR MARCH 1. THE ROGUE AT RAYGOLD FLOWED 122 PERCENT OF NORMAL DURING FEBRUARY AND THE UMPQUA AT ELKTON 107 PERCENT OF NORMAL.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Althouse Creek	Average	Average
Applegate River, Big	Average	Average
Applegate River, Little	Average	Average
Ashland Creek	Average	Average
Butte Creek, Big	Excellent	Excellent
Butte Creek, Little	Excellent	Excellent
Cow Creek	Excellent	Excellent
Deer Creek	Excellent	Excellent
Elk Creek	Excellent	Average
Emigrant Creek (abv. res.)	Average	Average
Evans Creek	Excellent	Excellent
Gold Hill Irrigation Dist.	Excellent	Excellent
Grants Pass Irrig. Dist.	Excellent	Excellent
Grave Creek	Excellent	Excellent
Illinois River, East Fork	Average	Average
Illinois River, West Fork	Average	Average
Jump-off-Joe Creek	Excellent	Average
Neil Creek	Average	Fair
Red Blanket Creek	Excellent	Average
Rogue River	Excellent	Excellent
Sucker Creek	Average	Average
Table Rock Irrig. Dist.	Excellent	Average
Thompson Creek	Average	Fair
Wagner Creek	Average	Fair
Williams Creek	Average	Fair



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Applegate near Copper	154	110	April-Sept.		140
Clearwater above Trap Creek ^d	91	125	April-Sept.		73
Fourmile Lake net Inflow ^d	6.1	150	April-Sept.		4.1
Hyatt Reservoir Net Inflow	6.5	125	April-July		5.2
Illinois River near Kerby	200	98	April-July		205
	206	98	April-Sept.		211
Little Butte, N. Fk. at Fish Lk. nr. Lake Cr. ^d	16.5	115	April-Sept.		14.4
Little Butte, South Fork near Lake Creek	40	126	April-July		33
Rogue above Prospect	321	119	April-July		269
	386	118	April-Sept.		326
Rogue, South Fork near Prospect ^d	79	129	April-July		62
	92	124	April-Sept.		74
Rogue River below South Fork		DISCONTINUED			
Rogue at Raygold near Central Point	890	114	April-July	1110	781
	1064	113	April-Sept.	1303	941
Rogue at Grants Pass	1026	109	April-Sept.		940
Umpqua, No. blw. Lemolo Res. nr Toketee Falls ^d	200	114	April-Sept.		176

FORECAST DATE of LOW FLOW VALUES

FORECAST POINT	Low Flow Value Second/Ft.	Forecast Date Stream Will Recede to Low Flow Value	Average Date of Low Flow Value
Little Butte Creek, South Fork	100	June 5	May 27
Rogue at Raygold	1200	Sept. 8	Aug. 7

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average <i>i</i>
Emigrant Lake	39.0	29.9	28.2	28.3*
Fish Lake	7.8	8.1	6.0	5.7
Fourmile Lake	16.1	^b	8.5	9.9
Howard Prairie	60.0	59.9	56.1	26.1
Hyatt Prairie	16.1	16.0	14.9	10.7
*Average for years of record (in base period) after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <i>i</i>
Applegate	3	144	119
Bear Creek	2	96	103
Butte Creek	4	115	163
Illinois River	3	146	96
North Umpqua	3	116	147
Rogue River	6	133	153

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-6 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK
KLAMATH WATERSHEDS
OREGON
as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

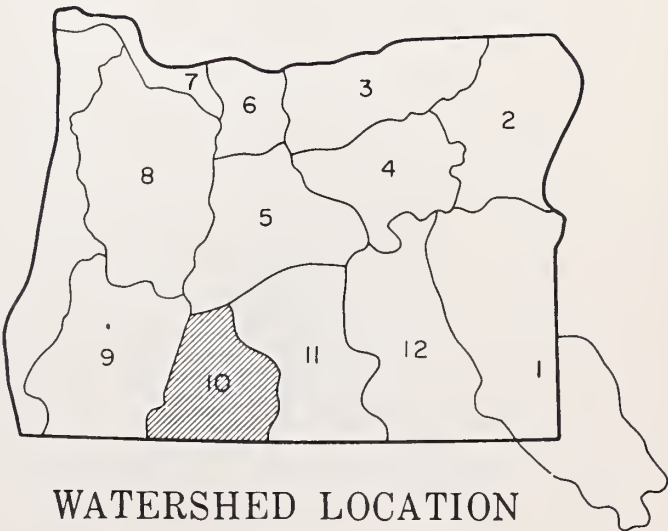
GENERAL OUTLOOK

WATER SUPPLIES FOR KLAMATH BASIN WATER USERS WILL BE ABOVE AVERAGE DURING THE SPRING AND SUMMER OF 1972. MOUNTAIN SNOW COVER RANGES FROM 116 PERCENT ON THE WILLIAMSON TO 170 PERCENT ON THE LOST RIVER. PRECIPITATION WAS 107 PERCENT OF AVERAGE DURING FEBRUARY AND 113 PERCENT OF AVERAGE FOR THE NOVEMBER-FEBRUARY PERIOD. SOIL MOISTURE WAS NEAR AVERAGE ON MARCH 1. AREA RESERVOIRS WERE HOLDING 128 PERCENT OF AVERAGE STORAGE ON MARCH 1. THE KLAMATH NET INFLOW WAS 102 PERCENT OF AVERAGE DURING FEBRUARY.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Ft. Klamath Valley	Excellent	Average
Lost River (Clear Lake)	Excellent	Average
Lost River (Gerber)	Excellent	Average
Lost River (Willow Res.)	Excellent	Average
Sprague River	Average	Average
Upper Klamath Lake	Average	Average
Williamson River	Average	Average



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average ⁱ
Clear Lake Reservoir Inflow ^k	105	161	March-July		65
Gerber Reservoir Inflow ^k	41	125	March-July		32
Sprague near Chiloquin	348	109	March-July		299
	317	107	April-Sept.		296
Upper Klamath Lake Net Inflow ^k	758	108	March-July	981	701
	695	112	April-Sept.	832	619
Williamson below Sprague River	590	116	March-July		510
	551	116	April-Sept.		475

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Clear Lake	440.2	336.6	341.3	227.3
Gerber	94.0	85.4	79.6	48.6 ^m
Upper Klamath Lake	584.0	472.4	446.3	421.5

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Lost River	3	184	170
Sprague River	3	120	120
Upper Klamath	8	133	129
Williamson River	3	107	116

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Upper Klamath	1	92	99

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK
LAKE COUNTY, GOOSE
LAKE WATERSHEDS
OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

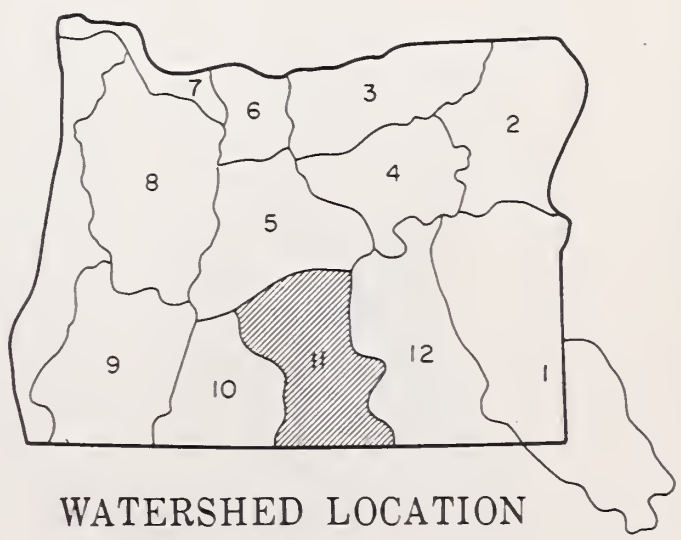
GENERAL OUTLOOK

LAKE COUNTY, GOOSE LAKE WATER USERS WILL HAVE EXCELLENT WATER SUPPLIES AVAILABLE FOR THE 1972 SEASON. THE SNOWPACK RANGES FROM 120 PERCENT ON THE CHEWAUCAN TO 190 PERCENT ON THE DEEP CREEK DRAINAGES. PRECIPITATION WAS 115 PERCENT OF AVERAGE DURING FEBRUARY AND 92 PERCENT OF AVERAGE FOR THE NOVEMBER-FEBRUARY PERIOD. COTTONWOOD AND DREWS RESERVOIRS ARE HOLDING 128 PERCENT OF AVERAGE AMOUNTS FOR MARCH FIRST.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Chewaucan River	Excellent	Average
Crooked Creek	Excellent	Average
Deep Creek	Excellent	Average
Dry Creek	Excellent	Average
East Side Goose Lake	Excellent	Average
Guano Lake	Excellent	Average
Honey Creek	Excellent	Average
Lakeview Water Users Assn.	Excellent	Average
Rock Creek (Hart Mountain)	Excellent	Average
Silver-Buck Creeks	Excellent	Average
Summer Lake	Excellent	Average
Thomas Creek	Excellent	Average
Twentymile Creek	Excellent	Average
Warner Lakes	Excellent	Average



WATERSHED LOCATION

STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR		PAST RECORD	
	FORECAST		THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average	Last Year	Average ⁱ
Chewaucan near Paisley	100	113	March-July	91
Deep above Adel	89	125	March-July	71
Drews Reservoir net Inflow ^d	52	114	March-July	46
Honey Creek near Plush	26	142	March-July	18.0
Silver Creek near Silver Lake	20	95	March-July	21
Twentymile near Adel	40	176	March-July	24

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average ⁱ
Chewaucan, Silver Creek, Drew Creek	1	92	99
Honey, Deep, 20-mile Crs.	1	96	103

RESERVOIR STORAGE (Thousand Ac. Ft.) END OF MONTH

RESERVOIR	Usable Capacity	Usable Storage		
		This Year	Last Year	Average ⁱ
Cottonwood	8.7	2.7	7.6	3.2*
Drews	63.0	50.3	61.8	38.3
Thompson Valley	19.5	6	17.8	- -
*Average for years of record (in base period) after reconstruction.				

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average ⁱ
Chewaucan River	3	122	120
Deep Creek	3	213	190
Drew Creek	3	171	140
Honey Creek	3	191	174
Silver Creek	3	124	134
Twentymile Creek	3	265	180

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.



WATER SUPPLY OUTLOOK HARNEY BASIN WATERSHEDS OREGON

as of

MARCH 1, 1972

U. S. D. A. SOIL CONSERVATION SERVICE
OREGON STATE UNIVERSITY ... OREGON STATE ENGINEER

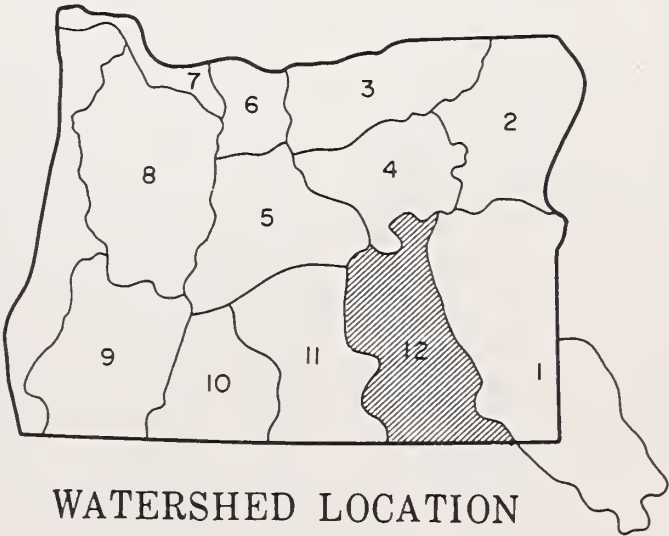
GENERAL OUTLOOK

EXCELLENT WATER SUPPLIES ARE IN PROSPECT FOR MOST OF THE HARNEY BASIN DURING THE SPRING AND SUMMER OF 1972. WATER SUPPLIES ON THE TROUT CREEK DRAINAGE ARE AVERAGE. THE MOUNTAIN SNOWPACK IS 150 PERCENT OF AVERAGE. SOIL MOISTURE SUPPLIES ARE NEAR AVERAGE ON MARCH 1. PRECIPITATION IN THE BASIN WAS 87 PERCENT OF AVERAGE DURING FEBRUARY AND 125 PERCENT FOR THE NOVEMBER-FEBRUARY PERIOD.

WATER SUPPLY OUTLOOK

Expressed as "Poor, Fair, Average, Excellent" With Respect to Usual Supply.

STREAM or AREA	Flow Period	
	Spring Season	Late Season
Catlow Valley	Excellent	Average
Cow Creek	Excellent	Average
Donner und Blitzen River	Excellent	Average
Mill-Coffeept Creeks	Excellent	Average
Rattlesnake Creek	Excellent	Average
Silver Creek	Excellent	Average
Silvies River	Excellent	Average
Soldier-Prather Creek	Excellent	Average
Trout Creek	Average	Fair
Whitehorse Creek	Average	Fair



STREAMFLOW FORECASTS

BASIN, STREAM and/or FORECAST POINT	THIS YEAR			PAST RECORD	
	FORECAST		FORECAST PERIOD	THOUSAND ACRE FEET	
	Thousand Acre Feet	Percent of Average		Last Year	Average <i>i</i>
Donner und Blitzen near Frenchglen	95	167	March-July		57
	91	166	April-Sept.		55
Silver near Riley	40	228	April-July		17.9
Silvies near Burns	175	173	March-July		101
	145	175	April-Sept.		83
Trout near Denio	6.2	81	March-July		7.7
	5.1	68	April-Sept.		7.5

SOIL MOISTURE

RIVER BASIN	Number of Stations	THIS YEAR'S MOISTURE as PERCENT OF:	
		Last Year	Average <i>i</i>
Silvies River, Silver Cr.	3	90	97
Trout Cr., Donner und Blitzen River	1	84	106

SUMMARY of SNOW MEASUREMENTS

(COMPARISON WITH PREVIOUS YEARS)

RIVER BASIN and/or SUB-WATERSHED	Number of Courses Averaged	THIS YEAR'S SNOW WATER AS PERCENT OF	
		Last Year	Average <i>i</i>
Donner und Blitzen R.	4	156	168
Silver Creek	3	172	152
Silvies River	4	146	154
Trout Creek	3	327	82

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 1

MARCH 1, 1972

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i

OWYHEE, MALHEUR WATERSHED					
Antelope Ridge (Ida.)	2/28	40	14.3	7.5	4.2 ^h
Battle Creek (Ida.)	3/7	12	4.2	1.2	3.1 ^m
Bear Creek ^e (Nev.)	3/7	64	25.0	22.1	15.3
Big Bend (Nev.)	2/24	46	13.4	8.3	6.9
Blue Mountain Springs	2/25	61	20.8	14.8	13.7
Blue Mtn. Springs Pillow	2/25		16.3	13.3	- -
Buck Pasture ^e	3/7	0	0.0	1.2	2.3 ^m
Buckskin, Lower (Nev.)	2/24	44	11.4	7.1	6.7
Buckskin, Upper (Nev.)	2/24	46	14.7	4.7	7.2
Bull Basin ^e (Ida.)	3/4	0	0.0	1.2	1.1 ^m
Bully Creek ^e	3/7	0	0.0	T	2.7 ^m
Call Meadow ^e	3/7	6	2.1	5.8	3.5 ^m
Columbia Basin ^e (Nev.)	2/25	48	13.9	6.1	- -
Cottonwood-Indian ^e	3/7	0	0.0	T	0.7 ^m
Crane Prairie	2/25	39	12.8	9.0	8.2
Disaster Peak (Nev.)	2/23	44	15.7	10.8	12.6
Eldorado Pass	2/28	10	3.2	3.8	2.7 ^h
Fawn Creek ^e (Nev.)	2/25	31	9.6	2.6	- -
Fish Creek	2/27	86	31.3	25.9	19.6 ^h
Fish Creek Pillow*	2/27	-	33.1	- -	- -
Flag Prairie ^e	2/7	8	2.8	6.7	3.4 ^m
Fox Creek (Nev.)	b			12.3	7.9 ^m
Fry Canyon (Nev.)	2/25	39	10.3	3.7	6.0
Gold Creek (Nev.)	2/24	32	9.7	5.5	4.7
Granite Peak (Nev.)	2/25	50	15.8	16.3	10.7
Hyde Pasture ^e (Ida.)	3/4	21	8.0	5.1	4.2 ^m
Jack Creek, Lower (Nev.)	c				
Jack Creek, Upper (Nev.)	2/25	37	11.1	5.2	8.0
Jack Peak (Nev.)	c				
Lake Creek R. S.	2/25	41	13.6	9.7	9.2
Laurel Draw (Nev.)	2/29	38	12.5	4.0	6.2 ^h
Logan Valley ^e	3/7	32	11.2	8.0	6.3 ^m
Lookout Butte ^e	3/4	0	0.0	T	0.2 ^m
Louse Canyon ^e	3/4	3	1.1	0.4	3.1 ^m
Martin Creek (Nev.)	2/25	41	10.9	7.1	7.8
Merritt Mountain ^e (Nev.)	2/25	48	14.9	2.6	- -
Midas ^e (Nev.)	2/22	18	6.3	0.9	2.5 ^h
Mud Flat (Ida.)	2/28	30	9.3	6.3	4.7 ^h
Oregon Canyon ^e	3/7	12	4.2	1.2	5.2 ^m
Quinn Ridge ^e (Nev.)	3/4	0	0.0	0.4	2.3 ^m
Red Canyon ^e (Ida.)	3/7	36	12.6	6.7	4.8
Rock Spring	2/24	24	7.2	5.8	4.8
Rodeo Flat (Nev.)	2/25	31	9.0	0.4	5.5
76 Creek (Nev.)	2/25	47	15.5	12.3	9.1 ^h
Silver City (Ida.)	3/1	64	25.6	15.7	12.5
Silvies	2/27	54	18.9	10.2	10.7 ^h
Silvies Pillow*	2/27		28.6	- -	- -
South Mountain #2 (Ida.)	2/25	62	19.1	12.7	9.5
Stag Mountain (Nev.)	2/25	35	10.5	2.6	- -
Stinking Water	2/28	T	T	T	2.7 ^h
Succor Creek ^e (Ida.)	3/4	36	13.6	2.6	5.0 ^m
Taylor Canyon (Nev.)	2/24	19	5.2	3.1	4.2
Toe Jam ^e (Nev.)	2/25	26	7.8	6.1	- -
Tremewan Ranch (Nev.)	2/24	5	0.4	0.0	1.1
Triangle (Ida.)	3/4	0	0.0	1.2	0.6
Trout Creek	3/7	16	5.6	1.8	6.3 ^m
"V" Lake ^e	3/7	33	11.5	4.3	3.6 ^m
Vaught Ranch ^e (Ida.)	3/7	18	6.3	1.2	- -
War Eagle ^e (Ida.)	3/7	69	24.1	16.6	- -

*Manometer reading.

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i

BURNT, POWDER, PINE, GRANDE RONDE IMNAHA WATERSHEDS					
Aneroid Lake #1	2/29	103	38.4	35.4	31.2
Aneroid Lake #2	2/29	92	35.2	33.0	26.9
Anthony Lake	2/28	92	34.5	24.8	22.4
Bald Mountain ^e (Ore.)	3/1	95	36.1	22.1	19.9 ^m
Beaver Reservoir	2/28	51	18.0	7.4	9.2
Beaver Reservoir (Alt.)	2/28	55	20.0	9.5	- -
Big Sheep ^e	3/1	69	26.2	25.6	21.2 ^m
Blue Mtn. Summit	2/28	33	11.4	8.5	7.2
Bourne	2/25	60	19.3	15.1	13.7
County Line	2/29	24	8.3	2.5	5.4
Dooley Mountain	2/23	36	12.0	9.8	7.2
Eilertson Meadows	2/24	43	14.3	11.3	9.7
Eldorado Pass	2/28	10	3.2	3.8	2.7 ^h
Gold Center	2/25	48	15.3	14.3	11.0
Goodrich Lake	3/3	149	57.5	- -	27.9 ^h
Intake House	2/24	45	14.4	11.5	- -
Little Alps	2/28	63	23.0	12.6	11.2 ^h
Little Antone	2/28	32	11.0	6.8	- -
Lucky Strike	2/24	63	22.5	9.2	10.7 ^h
Lucky Strike Pillow*	2/24		13.1	- -	- -
Meacham	2/23	50	18.5	3.6	8.9
Mirror Lake ^e	b			61.4	56.5 ^m
Moss Spring	2/28	86	31.8	26.8	19.9
Power Plant	2/24	28	8.8	6.4	- -
Schneider Meadows	2/28	90	32.5	37.4	26.4
Schoolmarm	2/29	17	6.0	1.1	4.6
Standley ^e	3/1	93	35.3	25.0	24.3 ^m
Taylor Green	2/28	60	22.0	19.0	14.4 ^h
Tipton	2/28	38	13.6	10.5	8.9
Tipton Snow Pillow	b			14.8	- -
Tollgate	2/28	85	38.2	22.8	21.5
TV Ridge	3/1	58	22.0	18.9	- -

*Manometer reading.

UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS

Arbuckle Mountain	2/25	50	17.9	6.9	9.6
Arbuckle Mtn. Pillow*	2/25		31.3	- -	- -
Battle Mountain Summit	2/25	21	6.8	T	1.8 ^m
Blue Mountain Camp	2/28	54	27.4	9.4	12.3 ^h
Emigrant Springs	2/23	30	11.3	T	4.4
High Ridge Pillow*	2/29	107	41.8	28.0	- -
Lucky Strike	2/24	63	22.5	9.2	10.7 ^h
Lucky Strike Pillow*	2/24		13.1	- -	- -
Meacham	2/23	50	18.5	3.6	8.9
Tollgate	2/28	85	38.2	22.8	21.5
Weston Mountain	2/28	0	0.0	T	T ^m

*Manometer reading.

BASIC DATA SUPPLEMENT 1

MARCH 1, 1972

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. i
UPPER JOHN DAY WATERSHEDS					
Anthony Lake	2/28	92	34.5	24.8	22.4
Arbuckle Mountain	2/25	50	17.9	6.9	9.6
Arbuckle Mtn. Pillow*	2/25		31.3	- -	- -
Battle Mountain Summit	2/25	21	6.8	T	1.8
Beech Creek Summit	2/28	20	8.1	4.3	4.4
Blue Mountain Springs	2/25	61	20.8	14.8	13.7
Blue Mtn. Springs Pillow*	2/25	-	16.3	13.3	- -
Blue Mountain Summit	2/28	33	11.4	8.5	7.2
Derr	2/25	46	15.4	6.8	8.3
East Fork Canyon ^e	b			- -	9.0
Gold Center	2/25	48	15.3	14.3	11.0
Indian Creek Butte ^e	3/7	91	31.9	18.8	19.3
Izee Summit	2/24	31	9.9	6.6	7.2
Lucky Strike	2/24	63	22.5	9.2	10.7
Lucky Strike Pillow*	2/24		13.1	- -	- -
Marks Creek	2/28	13	4.5	1.7	2.9
Ochoco Meadows	2/29	33	12.1	7.9	8.1
Olive Lake ^e	2/29		25.0	18.8	16.5
Schoolmarm	2/29	17	6.0	1.1	4.6
Snow Mountain	2/25	53	19.2	11.6	11.0
Snow Mtn. Pillow	2/25	49	15.7	11.3	- -
Starr Ridge	2/24	28	9.4	5.2	4.9
Tipton	2/28	38	13.6	10.5	8.9
Tipton Snow Pillow				14.8	- -
Williams Ranch	2/24	7	3.0	- -	1.3
*Manometer reading.					
UPPER DESCHUTES WATERSHEDS					
Black Pine Spring			DISCONTINUED		
Caldwell Ranch	3/2	36	10.4	10.9	11.5
Cascade Summit	2/28	96	39.4	35.3	24.0
Chemult	2/29	29	10.6	10.8	9.7
Deer Creek			DISCONTINUED		
Derr	2/25	46	15.4	6.8	8.3
Hogg Pass	3/1	138	62.8	45.5	33.1
Hungry Flat	3/2	20	7.4	10.2	5.3
Irish-Taylor	3/1	133	56.2	- -	31.5
Irish-Taylor Pillow	3/1		61.3	43.9 ^g	- -
Marks Creek	2/28	13	4.5	1.7	2.9
Mowich			DISCONTINUED		
New Crescent Lake	2/28	40	15.4	13.3	12.9
New Dutchman Flat #2	3/2	185	75.1	54.0	43.3
Ochoco Meadows	2/29	33	12.1	7.9	8.1
Snow Mountain	2/25	53	19.2	11.6	11.0
Snow Mtn. Pillow	2/25	49	15.7	11.3	- -
Tamarack	2/28	19	6.8	3.9	4.8
Tangent	3/2	77	32.4	27.2	19.8
Three Creek Butte	2/25	53	15.6	11.6	9.4
Three Creek Meadow	2/25	68	23.3	19.1	16.0
Three Creek Mdw. Pillow	2/25	81	25.0	25.5	- -
Waldo Lake	3/2	119	47.6	30.1	25.5
Willamette Pass	3/2	128	53.8	43.7	33.7
Willamette Pass Pillow	b			48.8	- -

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave. 2
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS					
Brooks Meadows	2/22	37	16.9	10.1	9.6 ^h
Clear Lake	2/24	41	16.1	9.4	8.2
Clear Lake (Experimental)	2/24	62	22.8	14.6	14.5 ^h
Cooper Spur			DISCONTINUED		
Cooper Spur Alt.	3/3	37	13.7	14.3	- -
Greenpoint	2/28	36	15.7	22.9	12.5
Knebal Springs	2/22	26	10.8	5.8	6.2 ^h
Parkdale	3/3	T	T	1.0	- -
Phlox Point	2/25	212	93.5	59.5	49.5
Red Hill	3/1	139	62.6	52.5	31.0
Still Creek	2/24	85	35.4	23.6	18.4
Still Creek (Alt #2)	2/24	87	36.5	22.5	- -
Switchback	3/3	43	15.6	19.2	11.5 ^m
Tilly Jane	2/26	130	58.1	41.6	32.6
Ulrich Ranch Junction	2/22	7	2.0	3.9	2.1 ^m
Umbrella Falls	3/1	220	101.2	77.1	- -
Upper Valley	3/3	7	1.0	2.4	- -
WILLAMETTE WATERSHEDS					
Cascade Summit	2/28	96	39.4	35.3	24.0
Champion	2/29	93	40.6	- -	21.9
Clackamas Lake	2/28	42	17.4	16.4	10.0
Clear Lake	2/24	41	16.1	9.4	8.2
Clear Lake (Experimental)	2/24	62	22.8	14.6	14.5 ^h
Dead Horse Grade	2/29	62	24.5	21.1	15.2
Detroit (Town)	3/2	3	2.3	3.0	0.5
Detroit Dam	3/2	T	T	2.7	0.5
Golden Curry Creek	2/29	26	9.6	- -	4.7
Hogg Pass	3/1	138	62.8	45.5	33.1 ^m
Lake Harriet	c			4.0	1.6
Laurel Mountain	2/28	27	14.2	13.2	- -
Layng Creek	2/29	0	0.0	2.0	T
Lookout Point Dam*	2/28	0	0.0	0.0	0.0
Lost Creek Ranch	2/29	22	6.4	10.3	3.0 ^h
Lund Park	2/29	0	0.0	2.4	0.2
Marion Forks	3/2	50	17.5	21.0	11.2 ^h
Marys Peak	2/29	52	22.9	16.0	9.0 ^m
Marys Peak (Alt.)	2/29	39	18.9	- -	- -
McCredie Springs	2/28	0	0.0	1.4	0.2
McKenzie	2/27	157	71.8	54.0	35.1
McKenzie Bridge	2/29	0	0.0	2.8	0.2
Mill City	3/2	0	0.0	1.8	0.0
Oakridge	2/28	0	0.0	0.3	T
Peavine Ridge	c			21.7	14.1 ^h
Peavine Ridge Pillow	2/29		29.7	- -	- -
Phlox Point	2/25	212	93.5	59.5	49.5
Railroad Overpass	2/28	0	0.0	2.0	2.4
Saddle Mountain	2/28	42	22.2	25.1	- -
Salt Creek Falls	2/28	54	21.5	20.5	12.8
Santiam Junction	3/2	94	38.9	29.1	19.2
Seine Creek	2/28	6	2.2	- -	- -
Still Creek	2/24	85	35.4	23.6	18.4
Still Creek Alt. #2	2/24	87	36.5	22.5	- -
Timothy Lake	3/1	62	22.4	- -	9.6 ^m
Valsetz Summit	2/28	0	0.0	- -	- -
Vida	2/29	0	0.0	1.4	0.0
Waldo Lake	3/2	119	47.6	30.1	25.5 ^h
Weaver Creek	2/29	T	T	- -	0.8
White Branch Slide	2/29	35	10.6	9.7	5.3
Whitewater Bridge	3/2	23	7.8	12.2	3.4
Willamette Pass	3/2	128	53.8	43.7	33.7 ^h
Willamette Pass Pillow				48.8	- -
*Known as Meridian Dam					

BASIC DATA SUPPLEMENT 1

MARCH 1, 1972

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.

ROGUE, UMPQUA WATERSHEDS					
Althouse	2/28	14	6.1	4.5	6.0
Althouse #2	2/28	20	8.7	5.6	-
Annie Spring	2/25	127	45.3	45.1	36.3
Beaver Dam Creek	2/29	44	21.0	19.5	9.6 ^m
Big Red Mountain	2/29	82	31.5	25.1	26.6
Billie Creek Divide	2/28	79	30.6	19.9	18.4
Caliban	2/25	107	41.2	28.8	-
Champion	2/29	93	40.6	-	21.9
Cold Springs Camp	2/22	103	41.0	36.2	27.5 ^h
Cold Springs Camp Pillow	3/1	-	34.5	32.1	-
Deadwood Junction	2/29	25	11.3	12.2	8.7 ^h
Diamond-Crater Summit	2/28	118	48.3	35.4	30.5 ^h
Diamond-Crater Sum. Alt.	2/28	105	42.7	30.3	-
Diamond Lake	2/23	78	23.5	20.7	18.5
Fish Lake	2/23	44	16.6	16.6	11.7 ^h
Fourmile Lake	c			22.8	20.6 ^m
Grayback Peak	2/28	59	25.3	17.8	24.9
Howard Prairie	2/29	23	10.2	11.8	8.4 ^h
Hyatt Prairie	2/29	21	8.5	10.7	7.4 ^h
King Mountain #1	2/26	32	9.6	11.3	-
King Mountain #2	2/26	25	6.6	7.2	-
King Mountain #3	2/26	7	1.4	0.5	-
King Mountain #4	2/26	0	0.0	0.0	-
King Mountain #5	2/26	0	0.0	0.0	-
King Mountain #6	2/26	0	0.0	0.0	-
Little Red Mountain	2/29	73	29.9	17.2	21.6
Mt. Ashland Switchback	2/25	110	34.7	32.5	-
Mule Creek	2/27	34	13.5	7.2	-
North Umpqua	2/28	48	20.5	16.1	12.0 ^h
Page Mountain	2/28	4	2.4	0.9	4.3 ^h
Park Headquarters	2/24	184	66.9	60.4	47.5 ^h
Red Butte #1	2/25	54	18.5	15.4	10.8 ^h
Red Butte #2	2/25	25	8.2	7.3	7.2 ^h
Red Butte #3	2/25	19	3.5	3.2	7.2 ^h
Red Butte #4	2/25	6	0.8	T	2.4 ^h
Red Butte #5	2/25	0	0.0	0.0	T ^m
Red Butte #6	2/25	0	0.0	0.0	0.0 ^h
Seven Lakes #2	2/24	148	57.3	33.3	32.1 ^h
Seven Mile	2/24	103	38.0	26.6	-
Silver Burn	2/26	52	16.8	15.2	11.3
Siskiyou Summit	2/24	24	5.2	9.0	5.7
Siskiyou Summit Alt. #2	2/24	25	6.5	9.6	-
Ski Bowl Road	2/25	90	27.8	28.3	-
South Fork Canal	2/25	9	1.5	5.8	1.7
Trap Creek	2/29	38	15.4	14.4	10.0 ^h
Whaleback	2/28	93	38.3	30.9	27.5

SNOW

DRAINAGE BASIN and/or SNOW COURSE	THIS YEAR			PAST REC.	
	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)	
				Last Yr.	Ave.

KLAMATH WATERSHEDS					
Annie Spring	2/25	127	45.3	45.1	36.3
Beatty (PP&L)	b			-	0.1
Billie Creek Divide	2/28	79	30.6	19.9	18.4
Bly Mountain					DISCONTINUED
Bly 101 Ranch (PP&L)	b			-	1.0 ^m
Chemult	2/29	29	10.6	10.8	9.7
Chiloquin (PP&L)	b			0.6	0.5
Cold Springs Camp	2/22	103	41.0	36.2	27.5 ^h
Cold Springs Camp Pillow	3/1	-	34.5	32.1	-
Crazyman Flat ^e	2/25	38	13.3	8.4	7.7 ^m
Crowder Flat ^e (Calif.)	2/29	6	2.1	0.8	2.0 ^m
Crystal (PP&L)	2/27	21	6.0	10.5	7.6 ^h
Diamond-Crater Summit	2/28	118	48.3	35.4	30.5 ^h
Diamond-Crater Sum. Alt.	2/28	105	42.7	30.3	-
Diamond Lake Jct. (97)	2/23	22	5.0	7.3	6.2 ^h
Dog Hollow ^e	2/29	0	0.0	0.0	0.4 ^m
Finley Corrals ^e	2/25	72	25.2	15.0	12.6
Fort Klamath (PP&L)	2/29	0	0.0	0.6	3.1
Fourmile Lake	c			22.8	20.6 ^h
Gerber	b			0.5	1.8 ^h
Harriman (PP&L)	b			7.0	2.7 ^m
Hyatt Prairie Reservoir	2/29	21	8.5	10.7	7.4 ^h
Kirk (PP&L)	2/29	12	5.4	-	5.5 ^m
Lake of the Woods	2/28	35	13.4	8.1	10.7
Park Headquarters	2/24	184	66.9	60.4	47.5
Pelican Guard Station					DISCONTINUED
Quartz Mountain	2/29	21	7.5	4.8	5.6
Quartz Mountain (Ext.)	2/29	20	7.9	4.5	-
Seven Lakes #2	2/24	148	57.3	33.3	32.1 ^h
Seven Mile	2/24	103	38.0	26.6	-
State Line ^e (Calif.)	2/29	32	11.2	5.8	7.5 ^m
Strawberry	3/7	28	11.6	5.7	6.6
Summer Rim	3/1	54	17.8	15.5	13.8
Summer Rim Snow Pillow	b			16.3	-
Sun Mountain					DISCONTINUED
Sycan Flat ^e	2/25	34	11.9	8.4	5.9 ^m
Taylor Butte	2/25	16	4.9	4.8	5.3 ^h

LAKE COUNTY, GOOSE LAKE WATERSHEDS

Adin Mountain (Calif.)	2/29	56	18.6	13.6	9.5
Bald Mountain (Nev.)	2/28	16	5.4	0.3	3.1
Bear Flat Meadow ^e	2/25	40	14.0	8.2	8.2 ^m
Camas Creek	2/26	51	14.7	8.5	9.5
Cedar Pass (Calif.)	3/3	66	24.4	12.9	12.3
Colvin Creek ^e	2/29	24	8.4	1.2	-
Cox Flat ^e	2/25	40	14.0	4.1	6.5 ^m
Crowder Flat ^e (Calif.)	2/29	6	2.1	0.8	2.0 ^m
Dismal Swamp ^e (Calif.)	2/29	62	21.7	12.2	13.4 ^m
Finley Corrals ^e	2/25	72	25.2	15.0	12.6 ^m
Hart Mountain ^e	2/29	5	1.7	0.5	1.6 ^m
Little Bally Mtn. ^e (Nev.)	2/29	10	3.5	1.4	2.1 ^m
Mt. Bidwell (Calif.)	c				
North Star (Calif.)	b				
Patton Meadows ^e	2/25	72	25.2	14.3	12.6 ^m
Quartz Mountain	2/29	21	7.5	4.8	5.6
Quartz Mountain (Ext.)	2/29	20	7.9	4.5	-
Sherman Valley ^e	2/29	56	19.6	8.6	10.0 ^m
Silver Creek	2/27	6	2.1	2.1	2.9
State Line ^e (Calif.)	2/29	32	11.2	5.8	7.5 ^h
Strawberry	3/7	28	11.6	5.7	6.6
Summer Rim	3/1	54	17.8	15.5	13.8
Summer Rim Snow Pillow	b			16.3	-
Sycan Flat	2/25	34	11.9	8.4	5.9 ^m
Willow Creek	2/29	24	8.4	0.9	3.2 ^m

MARCH 1, 1972

MARCH 1, 1972

SNOW		THIS YEAR			PAST REC.		SNOW		THIS YEAR			PAST REC.	
DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)		DRAINAGE BASIN and/or SNOW COURSE	Date of Survey	Snow Depth (In.)	Water Cont. (In.)	Water Content (inches)			
				Last Yr.	Ave. i					Last Yr.	Ave. i		
HARNEY BASIN WATERSHEDS													
Blue Mountain Springs	2/25	61	20.8	14.8	13.7								
Blue Mtn. Springs Pillow	2/25		16.3	13.3	- -								
Buck Pasture ^e	3/7	0	0.0	1.2	2.3 ^m								
Buckskin Lake ^e	3/7	0	0.0	0.0	0.2 ^m								
Call Meadows ^e	3/7	6	2.1	5.8	3.5 ^m								
Delintment Lake	2/25	34	11.0	5.3	6.5								
Denio Creek ^e	3/7	0	0.0	0.0	0.5 ^m								
Disaster Peak (Nev.)	2/23	44	15.7	10.8	12.6								
Emigrant Butte	2/25	13	3.5	2.7	4.1 ^h								
Fish Creek	2/27	86	31.3	25.9	19.6 ^h								
Fish Creek Pillow*	2/27	-	33.1	- -	- -								
Hart Mountain ^e	2/29	5	1.7	0.5	1.6 ^m								
Idlewild Camp	2/24	25	8.2	4.9	4.6								
Idlewild Camp Alternate	2/24	22	6.4	- -	- -								
Izee Summit	2/24	31	9.9	6.6	7.2								
Lake Creek R.S.	2/25	41	13.6	9.7	9.2								
Oregon Canyon ^e	3/7	12	4.2	1.2	5.2 ^h								
Rock Spring	2/24	24	7.2	5.8	4.8								
Silvies	2/27	54	18.9	10.2	10.7 ^h								
Silvies Pillow*	2/27	-	28.6	- -	- -								
Snow Mountain	2/25	53	19.2	11.6	11.0 ^h								
Snow Mountain Pillow	2/25	49	15.7	11.3	- -								
Starr Ridge	2/24	28	9.4	5.2	4.9								
Stinking Water	2/28	T	T	T	2.7 ^h								
Trout Creek ^e	3/7	16	5.6	1.8	6.3 ^m								
"V" Lake ^e	3/7	33	11.5	4.3	3.6 ^m								
*Manometer reading													

(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

[illegible]

*Manometer reading

- (a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67, adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 2

MARCH 1, 1972

SOIL MOISTURE

DRAINAGE BASIN and/or STATION		Profile (Inches)			Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity	This Year		Last Year	Average ⁱ	
OWYHEE, MALHEUR WATERSHEDS								
Bear Creek (Nev.)	7800	72	16.8	b		- -	11.4	
Big Bend (Nev.)	6700	48	16.7	2/24	13.9	16.5	15.1	
Blue Mountain Spring	5900	42	16.9	2/25	6.5	12.0	10.1	
Crane Prairie	5375	48	18.2	2/25	15.2	17.6	15.9	
Folly Farm	4450	30	12.5	c				
Jack Creek, Lower (Nev.)	6800	48	8.6	c				
Jordan Valley	4390	48	19.3	2/25	16.6	16.6	15.7	
Mud Flat (Ida.)	5500	48	12.8	2/28	14.0	14.4	11.4	
Rodeo Flat (Nev.)	6800	42	11.0	2/25	6.1	7.7	- -	
Taylor Canyon (Nev.)	6200	48	15.1	2/25	8.7	14.2	13.3	
Triangle (Ida.)	5150	48	16.6	c				
BURNT, POWDER, PINE, GRANDE RONDE, IMNAHA WATERSHEDS								
Blue Mountain Summit	5100	36	16.8	2/28	9.6	13.4	10.8	
Dooley Mountain	5430	36	9.2	2/23	2.8	5.2	3.9	
Emigrant Springs	3925	48	22.3	2/23	19.5	21.1	19.4	
Ladd Summit	3730	48	18.9	2/28	11.2	13.6	10.5	
Moss Springs	5850	36	25.8	2/28	14.2	16.0	- -	
Tollgate	5070	48	23.6	2/28	16.1	17.0	20.1	
UMATILLA, WALLA WALLA, WILLOW, ROCK, LOWER JOHN DAY WATERSHEDS								
Battle Mountain Summit	4340	48	13.8	2/25	13.8	13.8	13.0	
Emigrant Springs	3925	48	22.3	2/23	19.5	21.1	19.4	
Tollgate	5070	48	23.6	2/28	16.1	17.0	20.1	
UPPER JOHN DAY WATERSHEDS								
Battle Mountain Summit	4340	48	13.8	2/25	13.8	13.8	13.0	
Beech Creek	4800	48	21.3	2/28	11.6	16.8	13.5	
Blue Mountain Spring	5900	42	16.9	2/25	6.5	12.0	10.1	
Blue Mountain Summit	5100	36	16.8	2/28	9.6	13.4	10.8	
Derr	5670	24	9.0	2/25	8.3	8.1	8.2	
Marks Creek	4540	36	14.1	2/28	13.4	13.6	11.3	
Snow Mountain	6300	48	16.7	2/25	12.7	13.9	13.8	
Starr Ridge	5150	36	10.6	2/24	10.6	10.6	9.6	
Williams Ranch	4500	42	17.9	2/24	17.9	17.7	17.1	
UPPER DESCHUTES, CROOKED WATERSHEDS								
Derr	5670	24	9.0	2/25	8.3	8.1	8.2	
Marks Creek	4540	36	14.1	2/28	13.4	13.6	11.3	
Snow Mountain	6300	48	16.7	2/25	12.7	13.9	13.8	
HOOD, MILE CREEKS, LOWER DESCHUTES WATERSHEDS								
Cooper Spur	3490	72	26.4	3/3	14.2	14.4	- -	
KLAMATH WATERSHEDS								
Bly Mountain	5090	42	14.0	DISCONTINUED				
Quartz Mountain	5230	48	15.3	2/29	8.3	9.0	8.4	

MARCH 1, 1972

MARCH 1, 1972

DRAINAGE BASIN and/or STATION		Profile (Inches)		Date of Survey	Soil Moisture (Inches)		
Name	Elevation	Depth	Capacity		This Year	Last Year	Average
LAKE COUNTY, GOOSE LAKE WATERSHEDS							
Camas Creek	5720	42	14.5	2/26	12.8	13.3	12.4
Quartz Mountain	5230	48	15.3	2/29	8.3	9.0	8.4
HARNEY BASIN WATERSHEDS							
Blue Mountain Spring	5900	42	16.9	2/25	6.5	12.0	10.1
Fish Creek	7900	48	15.0	<i>b</i>		11.7	10.1
Folly Farm	4450	30	12.5	<i>c</i>			
Silvies	6900	48	16.4	2/27	13.7	16.2	12.9
Snow Mountain	6300	48	16.7	2/25	12.7	13.9	13.8
Starr Ridge	5150	36	10.6	2/24	10.6	10.6	9.6
Willow-Bald	5000	24	6.6	2/24	4.7	6.6	5.2

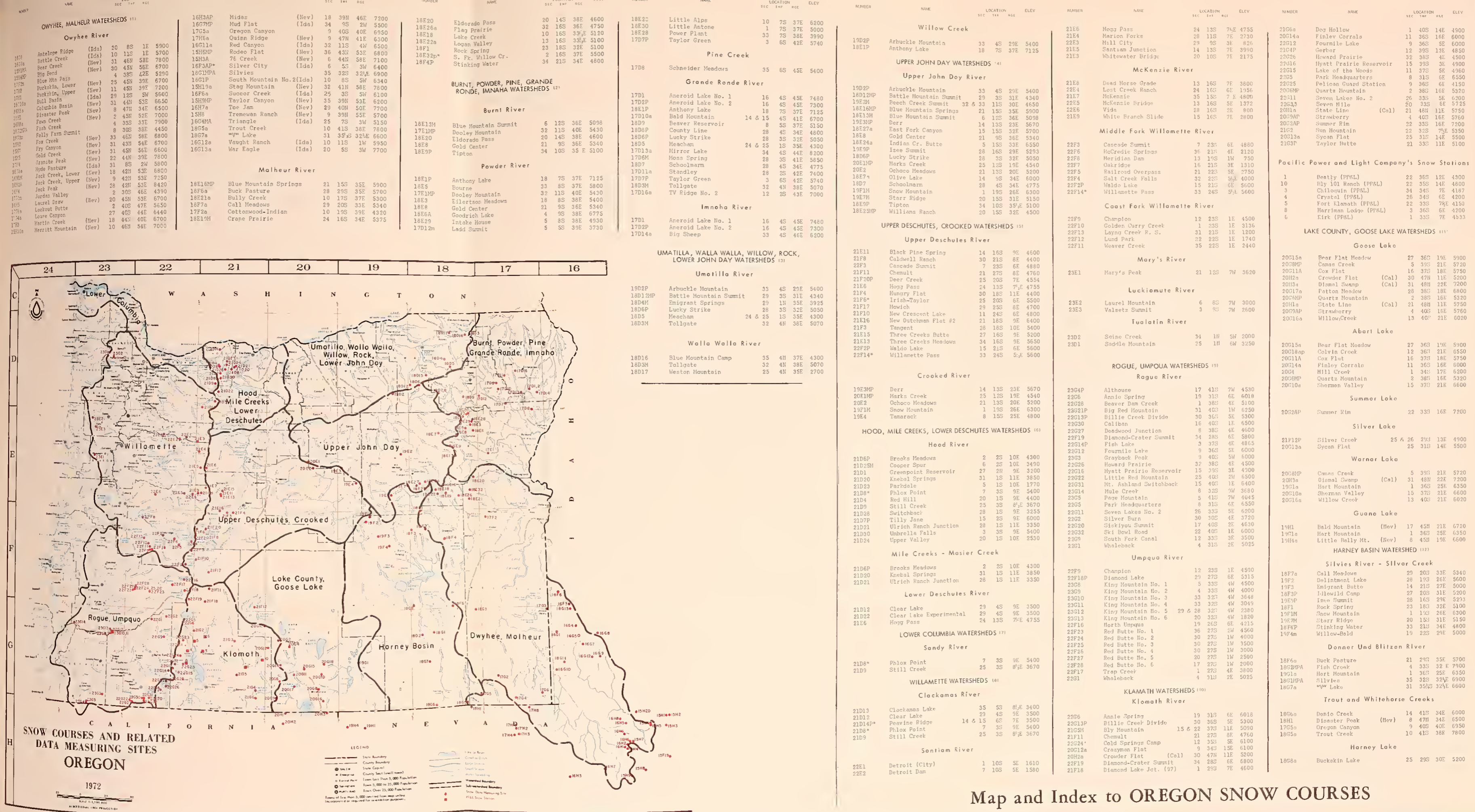
(a) Assuming normal meteorological conditions. (b) No report. (c) Not scheduled. (d) Corrected to natural flow. (e) Aerial snow depth gage, water content estimated. (f) Nearest current data. (g) Partly estimated. (h) 1953-67 adjusted average. (i) 1953-67, 15 year average. (j) Telephonic report - data not confirmed. (k) Data from PP&L Co. or USBR records. (m) Average for 5 or more years in base period.

BASIC DATA SUPPLEMENT 3

MARCH 1, 1972

PRECIPITATION (Inches)

DRAINAGE BASIN and PRECIPITATION GAGE LOCATION	ELEVATION	CURRENT INFORMATION		PAST RECORD	
		Date of Reading	Precipitation	Last Year	Average [†]
Althouse (Josephine County)	4530	1/31 to 2/28	8.89		
Arbuckle Mountain (Morrow County)	5400	10/6 to 2/25	21.95		
Big Red Mountain (Jackson County)	6240	1/26 to 2/29	9.00		
Brooks Meadow (Hood River County)	4520	10/8 to 2/22	25.90		
Camas Creek (Lake County)	5825	1/27 to 2/26	3.40		
County Line (Umatilla County)	4800	1/31 to 2/29	1.30		
Lucky Strike (Umatilla County)	5050	10/6 to 2/24	21.84		
Quartz Mtn. Summit (Lake County)	5300	1/27 to 2/29	3.34		
Silver Creek (Lake County)	4900	12/30 to 2/27	4.22		
Summer Rim (Lake County)	7200	10/21 to 3/1	40.00		
Taylor Green (Union County)	5800	1/29 to 2/28	2.90		
Tipton (Baker County)	5100	1/27 to 2/28	1.69		



Map and Index to OREGON SNOW COURSES



The Following Organizations Cooperate in the Oregon Snow Survey Work

STATE

- Idaho Cooperative Snow Surveys
- Nevada Cooperative Snow Surveys
- Oregon State University
- Oregon State Engineer and Corps of State Watermasters
- Oregon State Highway Engineers
- Soil and Water Conservation Districts of Oregon

COUNTY

- Douglas County Water Resources Survey

FEDERAL

- Department of Agriculture
 - Cooperative Extension Service
 - Forest Service
 - Soil Conservation Service
- Department of Commerce
 - NOAA, National Weather Service
- Department of the Interior
 - Bonneville Power Administration
 - Bureau of Land Management
 - Bureau of Reclamation
 - Fish and Wildlife Service
 - Geological Survey
 - National Park Service
- Department of National Defense
 - Corps of Army Engineers

PUBLIC UTILITIES

- Pacific Power and Light Company
- Portland General Electric Company
- California-Pacific Utilities Company

MUNICIPALITIES

- City of Baker
- City of La Grande
- City of The Dalles
- City of Walla Walla

IRRIGATION DISTRICTS

- Arnold Irrigation District
- Associated Ditch Companies
- Burnt River Irrigation District
- Central Oregon Irrigation District
- East Fork Irrigation District
- Grants Pass Irrigation District
- Hood River Irrigation District
- Jordan Valley Irrigation District
- Juniper Flat Irrigation District
- Lakeview Water Users, Incorporated
- Medford Irrigation District
- Middle Fork Irrigation District
- North Board of Control - Owyhee Project
- North Unit Irrigation District
- Ochoco Irrigation District
- Rogue River Valley Irrigation District
- South Board of Control - Owyhee Project
- Squaw Creek Irrigation District
- Talent Irrigation District
- Tumalo Project
- Vale-Oregon Irrigation District
- Warm Springs Irrigation District

PRIVATE ORGANIZATIONS

- The Crag Rats, Hood River, Oregon

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